



**UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/439,416	11/13/99	GUENTHER	G 0322282-0003

021125 WM51/1025  
NUTTER MCCLENNEN & FISH LLP  
ONE INTERNATIONAL PLACE  
BOSTON MA 02110

EXAMINER

HARVEY, D

ART UNIT	PAPER NUMBER
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2643

DATE MAILED:

10/25/00

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/439,416

Applicant(s)

Guenther

Examiner

Dionne Harvey

Group Art Unit

2643



☒ Responsive to communication(s) filed on Nov 13, 1999

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-20 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-20 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 and 11-13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Watkins (US 3,838,216).

Regarding claims 1-3 and 11-13, Watkins teaches a voice coil, comprising two or more wire coils(10,16); the wire coils being connected in parallel and being layered on top of one another(column 4, lines 11-12).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 4,5,14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins (US 3,838,216).

Regarding claims 4 and 14, Watkins teaches that the second wire coil is disposed about the first coil. Watkins fails to specifically teach that the first wire is disposed about a support. However, the Examiner takes Official Notice that the use of bobbins/wire coil supports is well known in the art and would have been obvious to one of ordinary skill in the art for the purpose of coil support.

Regarding claims 5 and 15, disclosed in column 1, lines 20-35, Watkins teaches that magnetic motors comprising a magnetic field source, is well known in the art.

3. Claims 6-9 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of Murray et al. (U.S. Patent no. 5,587,615).

Regarding claims 6,7,16 and 17, Watkins fails to specifically teach that the magnetic field source comprises a permanent magnet or a rare earth metal. As disclosed in column 4, lines 10-20, Murray et al. teaches an electromagnetic force generator comprising a magnetic structure made up of two blocks of rare earth magnetic material(61,63). Murray further teaches, as seen in column 2, lines 46-55, that the permanent magnet of the device is preferably constructed of the rare earth magnetic material due to its relatively high reluctance in relation to its coercive force and its resistance to demagnetization. It therefore, would have been obvious to one skilled in the art at the time of the invention to incorporate the rare earth magnet of Murray et al.(U.S. Patent no. 5,587,615) into the loudspeaker construction of Watkins for the reasons previously stated.

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Regarding claims 8,9,18 and 19, Watkins fails to specifically teach that the magnetic field source comprises neodymium or a neodymium boron magnet. However, the Examiner takes Official Notice that the use of neodymium boron iron magnets is well known in the art and would have been obvious to one of ordinary skill for the purpose of attaining a loudspeaker which is small, light in weight and thin while maintaining a high flux density in the magnetic gap.

4. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of Murray et al. (U.S. Patent no. 5,587,615) as applied to claims 6-9 and 18-19, and further in view of Hastings-James (US 4,300,022).

Regarding claims 10 and 20, The combination of Watkins and Murry fails to specifically teach a magnet having a cylindrical cross-section. However, as disclosed in column 2, line 20, Hastings-James teaches that it is well known in the art to construct a magnet circuit for a speaker unit having a cylindrical cross-section.

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Tanabe (US 5,715,324)** teaches the use of neodymium boron iron magnets.

**Ueda (US 5,751,828)** teaches the use of neodymium boron iron magnets.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statements for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111. The examiner can normally be reached on Monday through Friday from 8:30am to 6:00pm.

**Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, DC 20231

**or faxed to:**

(703) 308-6306, for formal communications for entry

**Or:**

(703) 308-6296, for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor(Receptionist)

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111.

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D.H.

October 23, 2000

  
HUYEN LE  
PRIMARY EXAMINER